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Operations Officer, County of Sacramento

Case Study Detailing the Impacts of the  
Pension Benefit Enhancement Debacle  
& the Use of POBs to Mitigate Budget  
Impacts

*CDIAC Workshop  
September 12, 2004*

**County of Sacramento**

# Background Events Leading to the Pension Funding Debacle

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- ◆ Stock Market Run-up of 1996-2000; PERS and other pension systems enjoy gains of up to 20%+ annually for 4 years vs. long-term investment return assumptions of 8-8.25%
- ◆ PERS and other pension systems develop temporary “excess earnings” of up to 30-35% of portfolio value
- ◆ PERS actuaries allow “contribution holidays” by many local governments who contract with PERS for pension benefits, and suggest that holidays will go on for many years
- ◆ Previous successful lawsuit by PERS challenging taxpayer benefits from “excess earnings” chill any suggestion that bloated portfolio values should reduce State contributions to PERS

# Background Events Leading to the Pension Funding Debacle

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- ◆ PERS labor-interest dominated Board of Directors advocates for 1999 Legislation (SB 400-Ortiz) to allow enhancement of State employee retirement benefits and local government law enforcement employees
- ◆ Subsequent legislation permits enhancements of other local government employee pension benefits to follow suit
- ◆ Benefit enhancements costs estimates range from 8-18% of salary but are temporarily masked by “excess earnings”
- ◆ Subsequent stock market 2001-2003 correction erases virtually all excess earnings
- ◆ 2004 earnings return to meet/exceed actuarial assumption, but nowhere near enough to offset losses during 2001-2003

# Retirement System Performance vs. Actuarial Assumptions

Overview of the County Retirement System

Actuarial & Actual Market Rate Investment Returns<sup>1</sup>



1. Net of Expenses

2. Reserves credited with 9.0% interest from unreserved account. For year ending June 30, 1992, reserves were credited with 4.5% in terest for the first 6 months, and 4.0% for the second 6 months.  
Source: Mercer Human Resources Consulting, Sacramento County Employees Retirements System, Actuarial Valuation Report



# Situation Overview: Sacramento County Employees' Retirement System ("SCERS")

## As of 6/30/03, System had become underfunded

### ◆ System funding status:

- Overfunded as of 6/30/02 (before enhancements)
- SCERS uses 5 year smoothing methodology; 20% of gains / losses recognized each year
- Gains/Losses amortized over a closed 30 year period recommenced as of 2003-04

### ◆ Normal retirement age is 50 for Safety and Miscellaneous members with 10 years of service

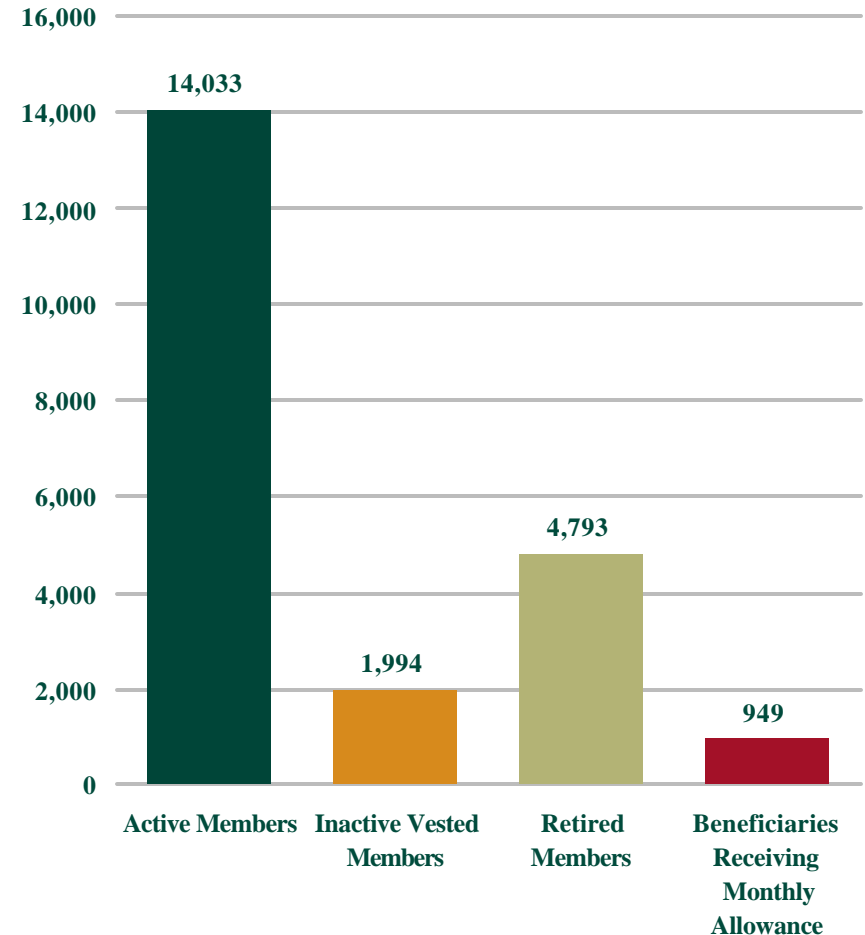
- Miscellaneous members may retire after 30 years of service regardless of age
- Safety members may retire after 20 years of service regardless of age

### ◆ Board approved 2% at 55 ½ for Miscellaneous members and 3% at 50 for Safety members effective June 29, 2003

### ◆ Previous benefits: 2% at 61 for Miscellaneous members and 2% at 50 for Safety Members

### ◆ Benefit increases: 16-25% for Miscellaneous; 50% for Safety

### Retirement System Composition



Source: Sacramento County, Retirement System, Annual Actuarial Valuation, June 30, 2002



# Impact of Benefit Enhancements

**Adoption of 2% at 55 ½ (Miscellaneous) and 3% at 50 (Safety) increased System Liability by \$429.6 million**

General Employees*		Public Safety*	
	Annual County Cost <sup>1</sup>		Annual County Cost <sup>2</sup>
	5.38%		15.42%
Current Plan <sup>3</sup>	\$28,052	Current Plan <sup>3</sup>	\$23,396
	14.04%		29.15%
Improved Plan: Total Cost	\$73,197	Improved Plan: Total Cost	\$44,224
	8.66%		13.73%
Improved Plan: Increased in Cost <sup>(4)(5)</sup>	\$45,145	Improved Plan: Increased in Cost <sup>(4)(5)</sup>	\$20,828
Change in Funding Ratio and Liability	-7.20% / \$276,292	Change in Funding Ratio and Liability	-3.99% / \$153,354

**\$429.6 million**

\* Percentages refer to percentage of payroll; figures in \$000

1. Assumes June 30, 2002 annual County payroll of \$521,413 MM.

2. Assumes June 30, 2002 annual County payroll of \$151,727 MM.

3. Reflects recommended rate adopted by the Board for June 30, 2002 valuation.

4. Includes all reciprocal terminated vested members.

5. Assumes 7/1/03 effective date for benefit improvement.



# Retirement System Assets: 10 Year Perspective

Overview of the County Retirement System

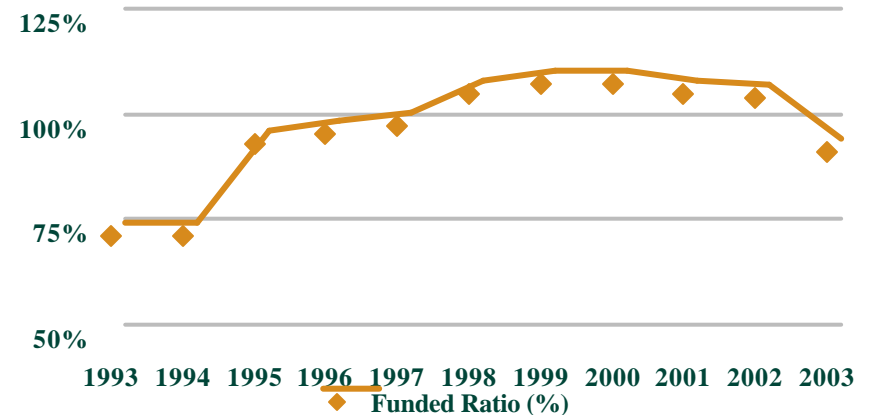
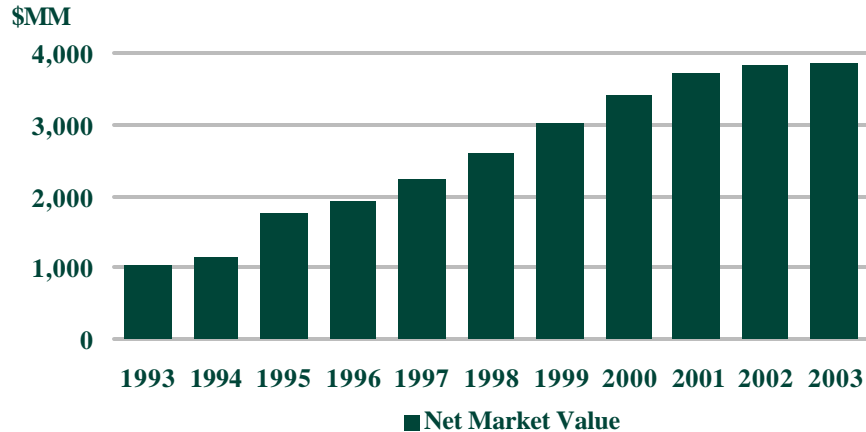
## Funding Progress Indicators

Valuation Date	Actuarial Value of Assets (\$000)	Actuarial Accrued Liability (\$000)	UAAL (\$000)	Funded Ratio (%)
06/30/94	1,141,166	1,541,541	400,375	74.03 <sup>1</sup>
06/30/95	1,767,064	1,835,864	68,800	96.25 <sup>2</sup>
06/30/96	1,956,715	1,987,230	30,515	98.46
06/30/97	2,238,557	2,226,440	(12,117)	100.54
06/30/98	2,600,547	2,409,642	(190,905)	107.92
06/30/99	3,017,639	2,734,548	(283,091)	110.35
06/30/00	3,427,348	3,111,760	(315,588)	110.14
06/30/01	3,718,198	3,451,864	(266,334)	107.72
06/30/02	3,839,081	3,586,250	(252,831)	107.05
06/30/03	3,864,400	4,108,294	243,894	94.06

## SCERS' Actuary Estimates County's UAAL at 6/30/04 to be \$480 million

- Declines in percentages primarily due to changes in salary and interest assumptions in 1992, assumed investment rate was 9.0% and projected salary increase assumption was 6.0%. In 1994, assumed investment rate of return was 8.0% and projected salary increase was 5.5%.
- Includes effect of 1995 POB.

## Net Market Value of Assets vs. Funded Ratio



# Understanding the Impact of Unrecognized Market Losses

- ◆ SCERS uses a 5 year smoothing methodology, meaning that gains/losses are amortized equally over 5 years

## Actuarial Value of Assets Deferred Market Returns

Fiscal Year	Market Value of Assets	Total Market Return	Expected Net Market Return	Investment Gain (Loss)	Deferred Factor	Deferred Return as of 6/30/03
1998-99	3,395,406,934	357,385,286	245,354,021	112,031,265	-	22,406,253
1999-00	3,679,912,856	312,187,721	272,141,586	40,046,135	0.20	16,018,454
2000-01	3,432,825,810	(211,411,270)	294,518,234	(505,929,504)	0.40	(303,557,703)
2001-02	3,199,234,414	(199,589,416)	274,979,342	(474,568,758)	0.60	(379,655,006)
2002-03 <sup>(1)</sup>	3,199,234,414	-	255,938,753	(255,938,753)	0.80	(255,938,753)
<b>Total</b>				<b>(1,084,359,615)</b>		<b>(900,726,755)</b>

1. Estimated





# Understanding the Impact of Unrecognized Market Losses

- ◆ SCERS uses a 5 year smoothing methodology, meaning that gains/losses are amortized equally over 5 years
- ◆ Example:
  - FY 1999 gain of \$112,031,265 realized 20% annually over five years = \$22,406,253 per year
  - FY 2003 is the 5th and final year for realizing FY 1999 results. Therefore, there is no remaining deferral, and the deferral factor = 0

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<b>Total</b>				<b>(1,084,359,615)</b>		<b>(900,726,755)</b>

Fiscal Year	FY 1999 Gains/(Losses)
1998-99	22,406,253
1999-00	22,406,253
2000-01	22,406,253
2001-02	22,406,253
2002-03	22,406,253
2003-04	-
2004-05	-
2005-06	-
2007-08	-
<b>Total</b>	<b>112,031,265</b>

**5 Year  
Amortization  
of Gain**

1. Estimated



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2002-03 <sup>(1)</sup>	3,199,234,414	-	255,938,753	(255,938,753)	0.80	(255,938,753)
<b>Total</b>				<b>(1,084,359,615)</b>		<b>(900,726,755)</b>

Fiscal Year	FY 1999 Gains/(Losses)	FY 2000 Gains/(Losses)
1998-99	22,406,253	
1999-00	22,406,253	8,009,227
2000-01	22,406,253	8,009,227
2001-02	22,406,253	8,009,227
2002-03	22,406,253	8,009,227
2003-04	-	8,009,227
2004-05	-	-
2005-06	-	-
2007-08	-	-
<b>Total</b>	<b>112,031,265</b>	<b>40,046,135</b>

1. Estimated



# Understanding the Impact of Unrecognized Market Losses

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2002-03 <sup>(1)</sup>	3,199,234,414	-	255,938,753	(255,938,753)	0.80	(255,938,753)
<b>Total</b>				<b>(1,084,359,615)</b>		<b>(900,726,755)</b>

Fiscal Year	FY 1999 Gains/(Losses)	FY 2000 Gains/(Losses)	FY 2001 Gains/(Losses)	FY 2002 Gains/(Losses)	FY 2003 Gains/(Losses) <sup>(1)</sup>	Total
1998-99	22,406,253					22,406,253
1999-00	22,406,253	8,009,227				30,415,480
2000-01	22,406,253	8,009,227	(101,185,901)			(70,770,421)
2001-02	22,406,253	8,009,227	(101,185,901)	(94,913,752)		(165,684,172)
2002-03	22,406,253	8,009,227	(101,185,901)	(94,913,752)	(51,187,751)	(216,871,923)
2003-04	-	8,009,227	(101,185,901)	(94,913,752)	(51,187,751)	(239,278,176)
2004-05	-	-	(101,185,901)	(94,913,752)	(51,187,751)	(247,287,403)
2005-06	-	-	-	(94,913,752)	(51,187,751)	(146,101,502)
2007-08	-	-	-	-	(51,187,751)	(51,187,751)
<b>Total</b>	<b>112,031,265</b>	<b>40,046,135</b>	<b>(505,929,504)</b>	<b>(474,568,758)</b>	<b>(255,938,753)</b>	<b>(1,084,359,615)</b>

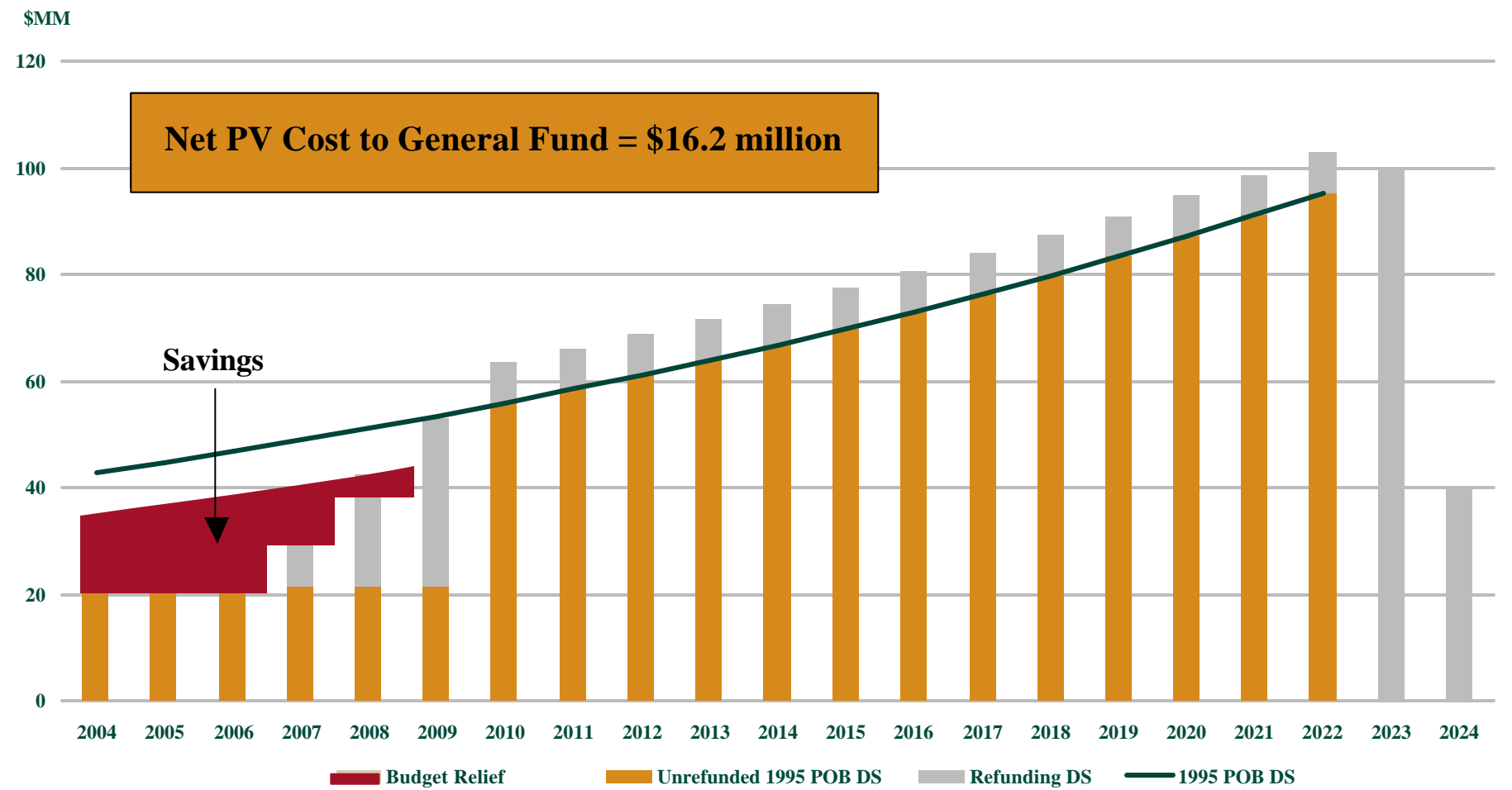
1. Estimated



# 2003 Restructuring of POBs Produced 5 Years of Savings

Transaction provides \$47 million of savings to County's General Fund over FY04-08  
County anticipates seeking administrative relief from Federal Reimbursements

Funding Vehicle is \$97.4MM Convertible CABs Maturing in FY2023 & 54.9MM CABs Maturing 2006-08



# Federal Reimbursement Concerns

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Summary

- ◆ Generally, the Fed has concurred that municipalities can “charge back” pension costs to the Federal government for employees in federally grant-funded programs
- ◆ As long as debt service on the POBs is lower than UAAL amortization payments, interest on POBs will be Federally reimbursed
  - If refunding bonds are issued, aggregate debt service of refunding POBs must be less than existing POBs in order to be eligible for Federal reimbursement
- ◆ In the case of Sacramento, the Fed has stated its intention to use the County’s 1995 POB debt service as the new “benchmark” from which to calculate federal reimbursements
- ◆ County is challenging Federal opinion since the initial OMB Guidance Letter decision stated that only interest costs less than the UAAL amortization will be federally reimbursed

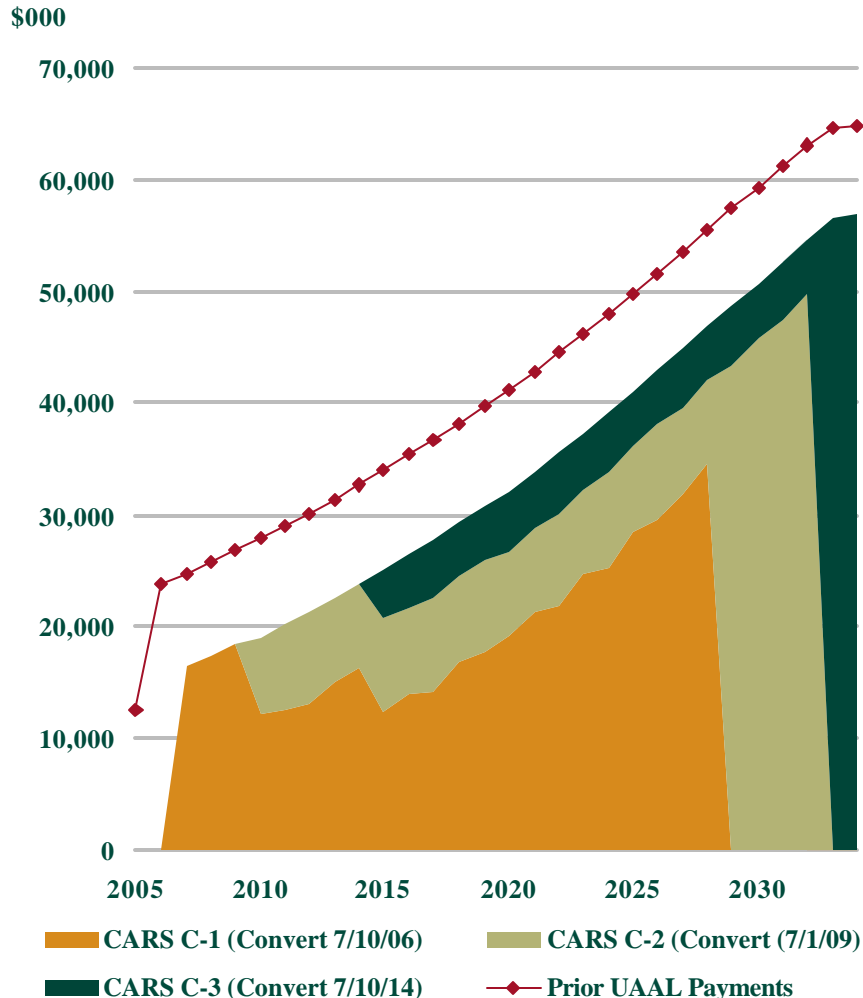


# 2004 County of Sacramento POBs Issued July 1, 2004

POB Update

**Convertible Auction Rate Securities (“CARS<sup>SM</sup>”) provide upfront relief and lower cost variable rate debt**

## Pro-Forma Debt Service vs. UAAL Payments



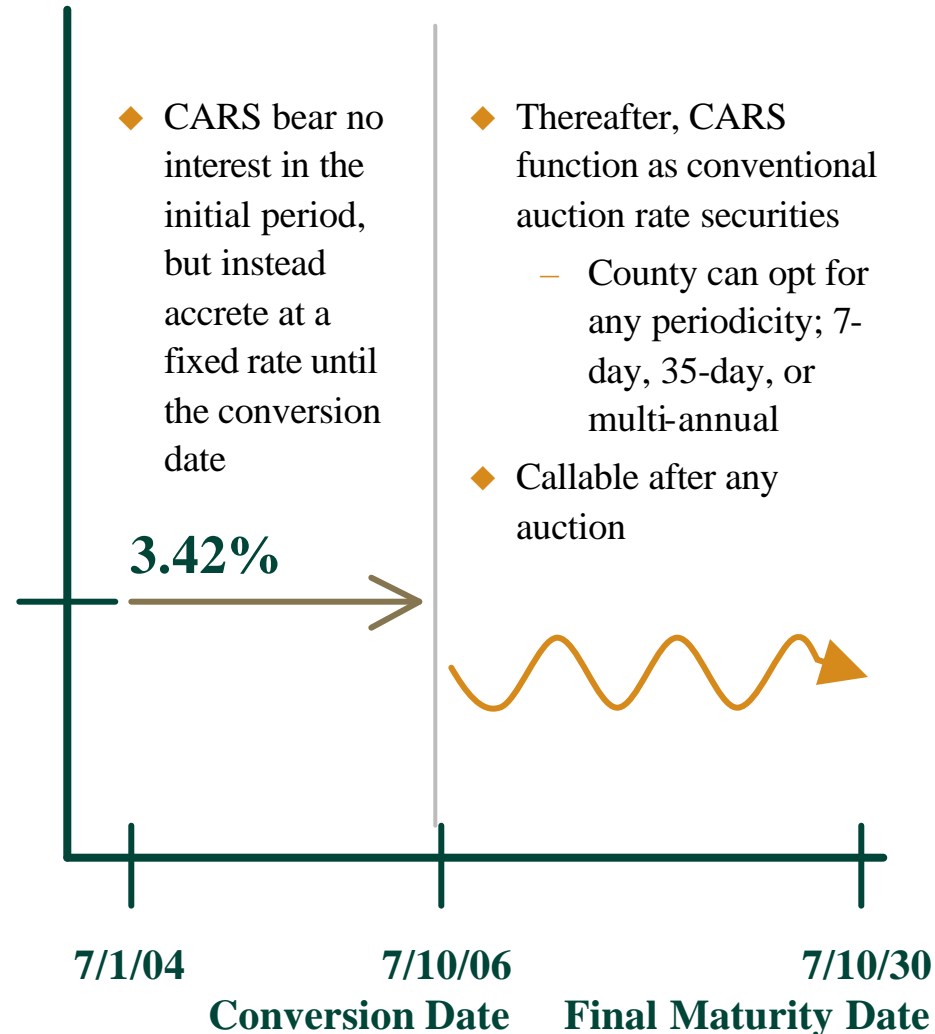
## Situation Overview

- ◆ County has \$420 million UAAL and faced significant budget pressure as a direct result of State’s budget situation
- ◆ County’s Goals:
  - Near term budget relief, while capturing savings from reducing 8.25% annual interest cost on UAAL
  - Maintain debt repayment flexibility without paying for an expensive call option
- ◆ Solution:
  - 3 tranches of CARS<sup>SM</sup> with different conversion dates
    - Series C-1 Conversion on 7/10/06 with an Initial Accretion Rate of 3.42%
    - Series C-2 Conversion on 7/10/09 with an Initial Accretion Rate of 4.61%
    - Series C-3 Conversion on 7/10/14 with an Initial Accretion Rate of 5.63%
  - Provides required upfront savings and meaningful savings thereafter



# The Mechanics of Convertible Auction Rate Securities (CARS<sup>SM</sup>)<sup>1</sup>

- ◆ Conventional Auction Rate Securities with initial period in a zero-coupon mode
  - No debt service until conversion date
- ◆ The CARS<sup>SM</sup> are non-callable during the initial accretion period, but have a par call beginning on the conversion date
  - Any business day following each auction thereafter
- ◆ At each conversion date, Lehman Brothers and Bear Stearns as the sole broker dealers (Lehman Brothers for Series C-1 & C-2 Bear Stearns for Series C-3), will conduct auctions for the CARS<sup>SM</sup>
  - In the event of a failed auction the CARS<sup>SM</sup> would bear interest at the maximum rate



1. CARS is a service mark of Lehman Brothers

# Sacramento County CARS<sup>SM</sup> Pricing Details

Series C-1 CARS <sup>SM</sup>				
Initial Par Amount	324,582,426.50			
Conversion Date	7/10/2009			
Accretion Rate	3.4225%			
Benchmark Pricing	8/15/06 STRIP + 65bp			
Initial Par Amount per \$25,000 at Conversion	23,339.50			
Par Amount at Conversion	347,675,000.00			
Ratings (Underlying)	A2/AA-			
Ratings (Insured)	Aaa/AAA/AAA			

Series C-2 CARS <sup>SM</sup>				
Initial Par Amount	39,147,165.75			
Conversion Date	7/10/2009			
Accretion Rate	4.6110%			
Benchmark Pricing	8/15/09 STRIP + 62bp			
Initial Par Amount per \$25,000 at Conversion	19,881.75			
Par Amount at Conversion	49,225,000.00			
Ratings (Underlying)	A2/AA-			
Ratings (Insured)	Aaa/AAA/AAA			

Series C-3 CARS <sup>SM</sup>				
Initial Par Amount	62,401,528.00			
Conversion Date	7/10/2014			
Accretion Rate	5.6275%			
Benchmark Pricing	8/15/14 STRIP + 62bp			
Initial Par Amount per \$25,000 at Conversion	14,332.00			
Par Amount at Conversion	108,850,000.00			
Ratings (Underlying)	A2/AA-			
Ratings (Insured)	Aaa/AAA/AAA			

FY Ended	Principal	Interest <sup>(1)</sup>	Compounded Interest	Debt Service <sup>(1)</sup>
6/30/2005	-	-	-	-
6/30/2006	-	-	-	-
6/30/2007	-	15,379,789.90	-	15,379,789.90
6/30/2008	816,882.50	15,342,742.15	58,117.50	16,217,742.15
6/30/2009	373,432.00	16,857,295.01	26,568.00	17,257,295.01
6/30/2010	700,185.00	15,291,254.51	49,815.00	16,041,254.51
6/30/2011	1,820,481.00	15,210,359.32	129,519.00	17,160,359.32
6/30/2012	1,353,691.00	16,661,303.72	96,309.00	18,111,303.72
6/30/2013	4,294,468.00	14,949,113.46	305,532.00	19,549,113.46
6/30/2014	4,294,468.00	16,227,631.87	305,532.00	20,827,631.87
6/30/2015	2,030,536.50	14,641,296.53	144,463.50	16,816,296.53
6/30/2016	2,240,592.00	15,993,208.93	159,408.00	18,393,208.93
6/30/2017	4,457,844.50	14,327,074.79	317,155.50	19,102,074.79
6/30/2018	6,768,455.00	14,024,174.34	481,545.00	21,274,174.34
6/30/2019	7,001,850.00	15,074,181.57	498,150.00	22,574,181.57
6/30/2020	9,942,627.00	13,226,590.86	707,373.00	23,876,590.86
6/30/2021	11,226,299.50	13,989,335.20	798,700.50	26,014,335.20
6/30/2022	13,980,360.50	12,037,217.70	994,639.50	27,012,217.70
6/30/2023	15,894,199.50	12,446,111.13	1,130,800.50	29,471,111.13
6/30/2024	18,858,316.00	10,390,310.48	1,341,684.00	30,590,310.48
6/30/2025	21,285,624.00	10,367,032.84	1,514,376.00	33,167,032.84
6/30/2026	24,903,246.50	8,199,700.34	1,771,753.50	34,874,700.34
6/30/2027	27,680,647.00	6,948,071.16	1,969,353.00	36,598,071.16
6/30/2028	30,598,084.50	6,110,697.42	2,176,915.50	38,885,697.42
6/30/2029	34,379,083.50	3,873,291.79	2,445,916.50	40,698,291.79
6/30/2030	38,160,082.50	2,350,122.36	2,714,917.50	43,225,122.36
6/30/2031	41,520,970.50	89,938.33	2,954,029.50	44,564,938.33
6/30/2032				
6/30/2033				
6/30/2034				
Total	324,582,426.50	300,007,845.71	23,092,573.50	647,682,845.71

FY Ended	Principal	Interest <sup>(1)</sup>	Compounded Interest	Debt Service <sup>(1)</sup>
6/30/2005	-	-	-	-
6/30/2006	-	-	-	-
6/30/2007	-	-	-	-
6/30/2008	-	-	-	-
6/30/2009	-	-	-	-
6/30/2010	-	2,177,522.60	-	2,177,522.60
6/30/2011	-	2,177,522.60	-	2,177,522.60
6/30/2012	-	2,395,274.86	-	2,395,274.86
6/30/2013	-	2,177,522.60	-	2,177,522.60
6/30/2014	-	2,177,522.60	-	2,177,522.60
6/30/2015	-	2,395,274.86	-	2,395,274.86
6/30/2016	-	2,177,522.60	-	2,177,522.60
6/30/2017	-	2,395,274.86	-	2,395,274.86
6/30/2018	-	2,177,522.60	-	2,177,522.60
6/30/2019	-	2,395,274.86	-	2,395,274.86
6/30/2020	-	2,177,522.60	-	2,177,522.60
6/30/2021	-	2,177,522.60	-	2,177,522.60
6/30/2022	-	2,395,274.86	-	2,395,274.86
6/30/2023	-	2,177,522.60	-	2,177,522.60
6/30/2024	-	2,395,274.86	-	2,395,274.86
6/30/2025	-	2,177,522.60	-	2,177,522.60
6/30/2026	-	2,395,274.86	-	2,395,274.86
6/30/2027	-	2,177,522.60	-	2,177,522.60
6/30/2028	-	2,395,274.86	-	2,395,274.86
6/30/2029	-	2,177,522.60	-	2,177,522.60
6/30/2030	-	2,177,522.60	-	2,177,522.60
6/30/2031	-	2,395,274.86	-	2,395,274.86
6/30/2032	39,147,165.75	124,429.86	10,077,834.25	49,349,429.86
6/30/2033				
6/30/2034				
Total	39,147,165.75	49,989,697.40	10,077,834.25	99,214,697.40

FY Ended	Principal	Interest <sup>(1)</sup>	Compounded Interest	Debt Service <sup>(1)</sup>
6/30/2005	-	-	-	-
6/30/2006	-	-	-	-
6/30/2007	-	-	-	-
6/30/2008	-	-	-	-
6/30/2009	-	-	-	-
6/30/2010	-	-	-	-
6/30/2011	-	-	-	-
6/30/2012	-	-	-	-
6/30/2013	-	-	-	-
6/30/2014	-	-	-	-
6/30/2015	-	4,815,100.70	-	4,815,100.70
6/30/2016	-	4,815,100.70	-	4,815,100.70
6/30/2017	-	5,296,610.77	-	5,296,610.77
6/30/2018	-	4,815,100.70	-	4,815,100.70
6/30/2019	-	4,815,100.70	-	4,815,100.70
6/30/2020	-	5,296,610.77	-	5,296,610.77
6/30/2021	-	4,815,100.70	-	4,815,100.70
6/30/2022	-	5,296,610.77	-	5,296,610.77
6/30/2023	-	4,815,100.70	-	4,815,100.70
6/30/2024	-	5,296,610.77	-	5,296,610.77
6/30/2025	-	4,815,100.70	-	4,815,100.70
6/30/2026	-	4,815,100.70	-	4,815,100.70
6/30/2027	-	5,296,610.77	-	5,296,610.77
6/30/2028	-	4,815,100.70	-	4,815,100.70
6/30/2029	-	5,296,610.77	-	5,296,610.77
6/30/2030	-	4,815,100.70	-	4,815,100.70
6/30/2031	-	5,296,610.77	-	5,296,610.77
6/30/2032	-	4,815,100.70	-	4,815,100.70
6/30/2033	30,269,184.00	2,927,577.40	22,530,816.00	55,727,577.40
6/30/2034	32,132,344.00	70,840.97	23,917,656.00	56,120,840.97
Total	62,401,528.00	93,040,801.46	46,448,472.00	201,890,801.46

Note: (1) Assumes 4.55% interest cost on CARS on an actual/360 day count basis beginning on each series conversion date.





# Summary

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- ◆ County Retirement System will swing from 107% (7% overfunded) to less than 75% (25% underfunded) within 5 years unless System consistently outperforms 8% investment rate of return assumption
  - Annual contributions will increase by \$113 million
- ◆ \$429.6 million of projected \$1.2 billion unfunded amount is due to negotiated enhancements of retirement benefits to match State of California's increases for State employees
- ◆ At peak, System had \$316 million in excess earnings, less than the \$429.6 million cost of the enhancements
- ◆ Had it not been for our 1995 issuance of \$534 million in POBs, our System would never had been overfunded, greatly reducing the argument that enhancements could be provided “at no cost to the taxpayers”
- ◆ “Overfunding” of pension systems gives rise to labor demands for enhancement of benefits, even though the overfunding of the pension systems may be only temporary due to stock market swings
- ◆ There is an obvious advantage to an employer to avoid having its pension system become overfunded, including but not limited to through the use of POBs
- ◆ Prudent use of POBs to finance “unfunded liabilities” should be exercised
  - Pension Reforms Needed